# STATE OF CALIFORNIA FISH AND GAME COMMISSION INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION (Pre-publication of Notice Statement)

Amend Sections 163 and 164
Title 14, California Code of Regulations
Re: Harvest of Herring and Harvest of Herring Eggs

Date of Initial Statement of Reasons: May 27, 2005

II. Dates and Locations of Scheduled Hearings:

(a) Notice Hearing: Date: June 24, 2005

Location: Bishop, CA

(b) Discussion Hearing: Date: August 19, 2005

Location: Morro Bay, CA

(c) Adoption Hearing: Date: September 30, 2005

Location: Susanville, CA

III. Description of Regulatory Action:

(a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

Under existing law, herring and herring eggs may be taken for commercial purposes only under a revocable permit, subject to such regulations as the Fish and Game Commission (Commission) shall prescribe. Current regulations specify: permittee qualifications; permit application procedures and requirements; permit limitations; permit areas; vessel identification requirements; fishing quotas; seasons; gear restrictions; quotas; landing and monitoring requirements; permit categories and conditions; royalty fees; permit performance deposit requirements; fishing and harvesting restrictions; processing requirements and permit suspension conditions and procedures.

The proposed regulations would establish fishing quotas, specify net measurement methods, modify mesh size in San Francisco Bay, establish season dates and times that fishing operations are allowed, and require reimbursement of Department of Fish and Game (Department) costs if fishing occurs on the weekend in Tomales Bay.

Annual management recommendations, to improve or provide for the efficient harvest and orderly conduct of the herring fishery, are solicited from interested fishermen and individuals at public meetings and from the Director's Herring Advisory Committee (DHAC), which is composed of various representatives from the commercial herring fishing industry. The proposed amendments to Sections 163 and 164, Title 14, CCR, reflect, in part, Department recommendations presented to the Director's Herring Advisory Committee. The Department prepared an Environmental Document, pursuant to the requirements of the California Environmental Quality Act. This Environmental Document will be released for public review in late June 2005. Certification of the Environmental Document is scheduled to occur at the September 30, 2005, Commission meeting in Susanville, California.

#### **BACKGROUND**

Pacific herring occur in four primary spawning areas of California, in San Francisco Bay, Tomales Bay, Humboldt Bay, and Crescent City Harbor. The

Department manages these populations as separate stocks. The commercial herring fisheries on these stocks are closely regulated through a catch quota system to provide for adequate protection and utilization of the herring resource. The Department conducts annual assessments of the size (spawning biomass) of the spawning populations of herring in San Francisco and Tomales bays. In addition to the assessment of spawning biomass, the Department examines the age structure of the spawning population, growth and general condition, biological aspects of the catch, and environmental conditions. These data serve as the basis for establishing fishing quotas for the next successive season.

### **FISHING QUOTAS**

Annual fishing quotas are conservatively set and have been limited to a total commercial catch of not more than 20 percent (harvest percentage) of the spawning biomass, to ensure adequate protection for the herring resource and provide for the long-term yield of the fishery. In practice, the harvest percentage has typically been set between 10 and 15 percent of the previous season's spawning biomass estimate. Harvest percentages are not determined by a fixed mathematical formula, rather, they are modified based on additional biological data collected each season, such as oceanic conditions, growth rates of herring, strength of individual year-classes, and predicted size of incoming year-classes (*i.e.*, recruitment). In response to poor recruitment, or indication of population stress, and/or unfavorable oceanographic conditions, harvest percentages are set below 15 percent. For example, the harvest percentage for the 1992-93, 1993-94, 1994-95, 1997-98, 2000-01, 2001-02, 2002-03 and 2004-05 fishing seasons in San Francisco Bay was set at 12, 10, 12, 10, 12, 10 and 10 percent, respectively.

## San Francisco Bay

The 2004-05 spawning biomass estimate for San Francisco Bay is 58,900 tons (including catch), which is above the 26-year average of 51,825 tons. Since the 2002-03 season, the Department has expressed concern regarding the health, specifically the age structure, of the San Francisco Bay herring population. Since the 1997-98 El Niño, there has been a decline in the estimated number of age four and older herring which support the fishery. However, preliminary estimates of numbers of fish at age during the 2004-05 season show above average numbers of age two to age five fish in the population. Estimated numbers of age six fish are still below the long-term average, but are the highest estimated since the 1998-99 season.

Two options are provided for the San Francisco Bay quota. San Francisco Bay Quota Option 1 would set the quota at 5,890 tons which represents 10 percent of the 2004-05 spawning biomass estimate. The Department recommends selecting Option 1 if the minimum mesh size remains at 2 1/8 inches. San Francisco Bay Quota Option 2 would set the quota at 4,502 tons which represents 7.6 percent of the 2004-05 spawning biomass estimate. The Department recommends selecting Option 2 if the minimum mesh size is changed to 2 inches.

### San Francisco Bay Quota Option 1:

Both the above-average spawning biomass estimate and above-average estimate of number of fish at age for several of the younger age classes are encouraging signs that the population may be rebuilding. The Department recommends a conservative harvest percentage of 10 percent if the minimum mesh size in remains at 2 1/8 inches. Setting the quota at the 10 percent level would facilitate continued strengthening of the population and would help mitigate impacts related to the weak El Niño conditions observed in 2004 and 2005 which may carry over to the 2005-06 season.

# San Francisco Bay Quota Option 2:

The proposed regulations would lower the minimum mesh size to 2 inches. The Department is concerned that a mesh size reduction would increase the take of age three and potentially age two fish in the commercial catch, and that an increase in the harvest of younger fish may have a long-term negative effect on the population. Since the 1997-98 El Niño, larger, older fish have been scarce or absent in both catch and population samples, declining well below long-term averages. One of the principal management goals, to restore and maintain the herring fishery, is to harvest age four fish and older from the population. If the Commission adopts regulations to lower the mesh size, the Department recommends setting the quota at less than 10 percent of the 2004-05 spawning biomass estimate to offset the potential increase in the catch of younger fish. The Department recommends reducing the quota at 10 percent of spawning biomass (5.890 tons) by the percentage of 2- and 3-year-old herring estimated to comprise the 2004-05 season landings (11.3 and 12.2 percent by weight respectively). The estimated percentage of 2- and 3-year-old herring is suggested as an approximation of the percentage that may be caught in the 2005-06 season. This results in a quota of 4,502 tons or 7.6 percent of the 2004-05 estimated spawning biomass.

Within the overall quota for San Francisco Bay, separate quotas are established for each gill net platoon (i.e., December ("DH"), Odd, and Even fishing groups). The overall quota is divided among the three platoons in proportion to the number of permits assigned to each platoon. Slight annual adjustments in the quota assignments for each fishing group are needed to account for attrition of permittees and the use of herring permits in the herring eggs on kelp (HEOK) fishery. Herring eggs on kelp fishing occurs only in San Francisco Bay and the fishery is regulated under Section 164, Title 14, CCR. Individual HEOK quotas will depend on the total herring fishery quota for San Francisco Bay established by the Fish and Game Commission under Section 163, Title 14, CCR. In 1994, the Commission decided to provide HEOK permittees possessing "CH" permits with a HEOK quota equal to approximately 0.79 percent of the overall quota.

All HEOK permittees must hold a herring permit. To fish HEOK, a herring permittee must waive his or her herring fishing privileges under Section 163 and "exchange" his or her "share" of the herring quota for an equivalent HEOK quota. The current factor used to convert an equivalent amount of resource from the sac roe fishery to the herring eggs on kelp fishery is 0.2237.

If the Commission were to adopt San Francisco Bay Quota Option 1, a 5,890-ton quota, this would result in a 10.4-ton individual quota for a "CH" gill net permittee and a 3.0-ton individual quota for a non-"CH" gill net permittee participating in the HEOK fishery. If the Commission were to adopt San Francisco Bay Quota Option 2, a 4,502-ton quota, this would result in a 7.9-ton individual quota for a "CH" gill net permittee and a 2.3-ton individual quota for a non-"CH" gill net permittee participating in the HEOK fishery.

#### **Tomales Bay**

In Tomales Bay, the 2004-05 spawning biomass estimate is 3,686 tons, which is a seventy percent decrease from the 2003-04 biomass estimate of 12,124 tons, and nine percent less than the thirteen-season average of 4,031 tons (Average based on seasons since the fishery re-opened in 1992.). The below-average spawning biomass estimate for the 2004-05 season is likely an effect of mild El Niño conditions. The disruption in herring movement offshore, due to changes in ocean temperature, may have caused herring to spawn in another area. Herring spawning in Tomales Bay this season also weighed less at a given size than under normal oceanic conditions. Typically, the Tomales Bay spawning biomass rebounds after an El Niño when normal ocean conditions return.

During the 2004-05 season, the commercial gill net catch for the Tomales Bay herring fishery was below the Department's established initial quota of 400 tons. Spawn escapement did not reach 4,000 tons prior to February 15 and consequently, there was no quota increase to the maximum of 500 tons. The Department's goal is to set the Tomales Bay initial quotas at less than the 20 percent maximum harvest percentage suggested in the Final Environmental Document for Pacific Herring Commercial Fishing Regulations 1998. The initial quota for Tomales Bay is set at a conservative level with regulatory provision to increase the quota based on in-season spawning assessments conducted by the Department. The exploitation rate for this past season was less than one percent. The exploitation rate for this fishery has averaged 5.6 percent and has only exceeded 10 percent twice since the 1992-93 season, in the 1995-96 and 1996-97 seasons at 17 percent and 14.7 percent respectively.

Subsection 163(g)(3)(A) specifies that the initial quota for Tomales Bay shall not exceed 400 tons. For the 2005-06 season, the Department proposes to set the initial Tomales Bay catch quota at 400 tons, which is eleven percent of the 2004-05 estimated spawning biomass of 3,686 tons. An initial quota of 400 tons still remains a conservative starting point for next season, and represents an exploitation rate of ten percent of the average spawning biomass since the fishery was re-opened in the 1992-93 season. The proposed regulations also contain provisions to increase the quota based on in-season estimates of spawning escapement. If the spawning escapement reaches or exceeds 4,000 tons prior to February 15, 2006, the quota shall be increased so that the total take of herring shall not exceed 500 tons for the season.

## **Humboldt Bay and Crescent City Harbor**

No changes to the regulations pertaining to quotas are proposed for Humboldt Bay or Crescent City Harbor herring fisheries.

# **NET MEASUREMENT**

Subsection 163(f)(2)(B) of the roe fishery regulations specifies that no permittee shall possess or fish more than a total of 65 fathoms (1 shackle) of gill net in San Francisco and Tomales Bays. Several members of the herring industry have expressed concern and some confusion as to where gill net length measurement is taken by Department enforcement. Both Department enforcement and industry agree that the length measurement should be taken along the cork line and that this should be specified in regulation. The Department is proposing to add the phrase "as measured at the cork line" to further specify and clarify gill net length measurement in the regulations.

#### **MESH SIZE**

Mesh size is used to control the size of fish targeted by the fishery. Subsection 163(f)(2)(B) of the existing regulations for the San Francisco Bay roe herring fishery specifies that the allowable length of mesh of any gill net used or possessed in the roe fishery shall not be less than 2 1/8 inches or greater than 2 1/2 inches, except that six permittees (designated by the department in writing) participating in Department-sponsored research on mesh size may use gill nets approved by the department with mesh less than 2  $\frac{1}{8}$  inches. The proposed amendment would change the minimum mesh size from 2 1/8 to 2 inches in San Francisco Bay.

Some members of the herring industry have requested that the Department reduce the mesh size in San Francisco Bay from 2 1/8-inch mesh to 2-inch mesh. They would like to make this change either permanently or on an experimental basis. The Department is concerned that a mesh size reduction would further increase the take

of age three and potentially age two fish in the commercial catch. The Department recognizes, however, that a reduction in mesh may increase the overall efficiency of the San Francisco Bay fishery; smaller mesh may enable the quota to be met in a shorter time period, allowing more schools to spawn un-fished, and result in fewer fish that may be lost during gill net retrieval (e.g., drop-outs). Unless the harvest percentage is kept below 10 percent, this potential increase in efficiency may be offset by the increase in harvest of younger fish. An increase in the harvest of younger fish may have a long-term negative effect on the population and may not be as valuable to the commercial herring market.

Existing regulations for the Tomales Bay fishery provided for the experimental use of a gill net mesh size of no less than 2 inches and no greater than 2 1/2 inches for the 2004-05 roe herring fishery season only. This was the fifth consecutive season that the experimental mesh size was used. The minimum mesh size of 2 inches in the Tomales Bay gill net fishery allowed the Department to continue to: (1) evaluate the use of this mesh size on the size and age composition of the current population; and (2) assess whether increased catch per unit effort (CPUE) could be obtained for the catch and still maintain the Department's management goal of a conservative exploitation rate. The current regulation specifies that the mesh size shall revert to no less than 2 1/8 inches or greater than 2 1/2 inches after the 2004-05 season, unless otherwise designated herein. However, the Department believes that a study period of more than five seasons is necessary to obtain sufficient data to evaluate the use of this mesh size, assess its impact on CPUE, and ensure Department management goals are maintained. The Department recommends continuation of the use of a gill net mesh size of no less than 2 inches or greater than 2 1/2 inches in Tomales Bay for the 2005-06 herring roe fishery season only. The Department will re-evaluate whether to continue with this experimental mesh size following the 2005-06 season.

### **SEASON DATES AND FISHING TIMES**

Season opening and closing dates for San Francisco and Tomales bays, as well as the dates of various provisions of the regulations, are adjusted each year to account for annual changes in the calendar. The consensus of the DHAC, which met on April 5, 2005, was to recommend that the dates of the roe herring fisheries in San Francisco Bay be set from 5 p.m. on Sunday, December 11, 2005 until 6:00 a.m. on Friday, December 23, 2005 and re-open at 5 p.m. on Monday, December 26, 2005 until 6:00 a.m. on Friday, December 30, 2005 ("DH" gill net platoon only). Recommended dates for the odd and even platoons are from 5:00 p.m. on Monday January 2, 2006 until noon on Friday, March 17, 2006. The consensus among Tomales Bay permittees was to recommend opening at 5:00 p.m. on Sunday, December 25, 2005 until noon on Friday, December 30, 2005, and from 5:00 p.m. on Sunday, January 1, 2006 to noon on Friday, February 24, 2006.

Existing regulations specify that herring fishing is not permitted from noon on Friday through 5:00 p.m. Sunday night in Tomales and San Francisco Bays. Several members of the Tomales Bay herring industry propose to allow weekend fishing for the commercial fishery in Tomales Bay. It is the goal of the industry in opening fishing on the weekend to increase the profitability of the fishery. Due to the limited time that herring are available to the fishery, and the variability of each spawning wave biomass, a weekend spawning event could represent a significant portion of herring that could be caught during the season. These fish lost to a weekend spawning event represent lost income to the industry. Removal of the weekend restriction would allow Tomales Bay herring fishermen to operate 24 hours a day, seven days a week, during the season and capitalize when spawning events occur, yet potentially limit their time on the water and

decrease operating costs. Weekend spawning events that have occurred in the past have limited fishermen from potential catch.

Currently, only the Crescent City and Humboldt Bay herring fisheries are permitted to fish seven days a week. Both Tomales Bay and San Francisco Bay herring fisheries are restricted from fishing from noon on Friday to 5:00 p.m. Sunday night. Originally, the weekend restriction was to prevent potential conflict with recreational user groups. The Tomales Bay fishermen feel that unlike San Francisco Bay, the potential for conflict is minimal due to the lack of recreational user groups on the water during winter months on Tomales Bay. Herring fishermen also believe the benefits of removing the weekend fishing restriction are: relief of pressure to fish as hard in a limited time frame; reduction of fishing pressure on spawning waves prior to spawning events; and a decrease in disruption to the environment. Weekend fishing in Tomales Bay would increase costs to the Department in the form of potential overtime of Department personnel. In other state fisheries, for example the HEOK fishery, a detailed invoice of the cost of operations by the Department for weekend harvest is provided to each individual permittee for payment. The Department proposes that should the Commission decide to allow weekend fishing in Tomales Bay, the Department shall be able to submit a detailed invoice to the appropriate party, or parties, for any increase in the cost of operations.

# CHANGES FOR CLARITY OR CONSISTENCY

Corrections to the Herring Eggs on Kelp Permit Application number in subsection164(h)(1) are proposed to coincide with the 2005-06 season application.

(b) Authority and Reference Sections from the Fish and Game Code for Regulation:

Authority: Sections 1050, 5510, 8550, 8553 and 8555, Fish and Game Code. References: Sections 309, 8043, 8550, 8552, 8552.6, 8553, 8554, 8555, 8556, 8557 and 8559, Fish and Game Code.

(c) Specific Technology or Equipment Required by Regulatory Change:

No new or specific technologies or equipment are required as a result of the proposed action.

- (d) Identification of Reports or Documents Supporting Regulation Changes:
  - (1) Informational Handout Packet for herring fisheries in (a) San Francisco Bay;(b) Tomales Bay; (c) Humboldt Bay, Crescent City Harbor.
  - (2) Meeting Notes, Director's Herring Advisory Committee Meeting, April 5, 2005, Sausalito, California.
  - (3) Meeting Notes, Public/Scoping Meeting, April 12, 2005, Bodega Bay, California.
  - (4) Meeting Notes, Public/Scoping Meeting, April 12, 2005, Sausalito, California.
- (e) Public Discussions of Proposed Regulations Prior to Notice Publication:
  - (1) Director's Herring Advisory Committee Meeting, April 5, 2005 Sausalito, California.
  - (2) Herring Town Hall Meeting in Sausalito on January 25, 2005

(3) Public Meeting, April 12, 2005, Bodega Bay and Sausalito, California.

# IV. Description of Reasonable Alternatives to Regulatory Action:

- (a) Alternatives to Regulation Change: No alternatives were identified.
- (b) No Change Alternative:
  A no change alternative would provide a quota for the 2005-06 fishing season of 3,440 tons.
- (c) Consideration of Alternatives:
  In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purposes for which the regulation is proposed or would be as effective as and less burdensome to the affected private persons in the long run than the proposed regulation.

# V. Mitigation Measures Required by Regulatory Action:

The proposed regulatory action will have no negative impact on the environment; therefore, no mitigation measures are needed. However, if the minimum mesh size for San Francisco Bay is reduced to 2-inch, there is a concern that the potential increased take of younger age class fish (2- and 3- year olds) could have a detrimental effect on the population over time. Therefore, under this proposal, existing minimum mesh size regulations would be changed from 2 1/8-inch to 2-inch for a trial period of two or more years. The San Francisco herring population and the gill net fishery would be monitored during this period to assess effectiveness of 2-inch mesh size in reducing fishery related mortality. In addition, lowering the harvest rate for the 2005-06 season would offer further protection of the younger age classes. Reducing the 5,890-ton proposed guota by the percentage of 2- and 3-year-old herring (11.3 and 12.2 percent by weight respectively) estimated to comprise the 2004-05 season landings as an approximation of what may be caught in the 2005-06 season, yields a quota of 4,502 tons or a harvest level of 7.6 percent of the 2004-05 estimated spawning biomass. Detrimental effects to the herring population or reduced product value would also be evaluated in determining minimum gill net mesh size following the trial period. The trial period may be ended early if significant negative impacts are identified to the herring population or other resources, or to product value. At that point the minimum mesh size would revert to 2 1/8-inch.

# VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

No adverse economic impacts. The proposed action for the 2005-06 season will have no adverse economic impact directly affecting business, including the ability of California businesses to compete with businesses in other states.

The proposed 2005-06 regulations would benefit California's commercial herring

fishermen and herring processing plants, all of which are small businesses as defined under Government Code Section 11342.610. Depending on the option selected by the Fish and Game Commission (Commission), direct benefits would accrue to the San Francisco Bay herring fishery in the form of increased catches, revenues, and related economic activity. Harvest quotas for San Francisco Bay herring fishermen would be increased from 3,440 tons to 5,890 tons (Option 1), or from 3,440 to 4,502 tons (Option 2).

Option 1 includes a proposed quota of 5,890 tons for San Francisco Bay in 2005-06, and represents potential increases in ex-vessel revenues of as much as \$2,080,296 in the San Francisco Bay herring fishery, which consists of approximately 388 herring fishermen. This increased revenue projection is based on average price data from the 2004-05 season, assuming that the entire San Francisco quota is harvested in each year ( $$4,994,078_{2005-06}$  -  $$2,913,782_{2004-05}$  = \$2,080,296, or \$2,120,144 when adjusted for inflation and presented in year 2005 dollars). Additionally, an in-season increase in the Tomales Bay guota, from 400 to 500 tons, is proposed should spawning escapement reach or exceed 4,000 tons before February 15, 2006. The 2005-06 Humboldt Bay and Crescent City Harbor herring fishery quotas remain the same as for the 2004-05. Thus the total ex-vessel revenue potential from all herring quotas, for all 417 herring fishermen, could be as much as \$5,499,339 under the proposed 2005-06 regulation. Using a statewide output multiplier and projected exvessel revenues of \$5,499,339, the economic contribution of the 2005-06 herring fishery could be as much as \$11,060,821 in year 2005 dollars. (This is derived by multiplying the projected ex-vessel revenues by a statewide demand output multiplier of 2.0113; e.g. 2.0113 x \$5,499,339 = \$11,060,821).

Option 2 has a proposed quota of 4,502 tons for San Francisco Bay in 2005-06, and represents potential increases in ex-vessel revenues of as much as \$901,678 in the herring fishery of 388 fishermen. This increased revenue projection is based on average price data from the 2004-05 season, assuming that the entire San Francisco quota is harvested in each year ( $3,815,460_{2005-06}$  -  $2,913,782_{2004-05}$  = 901,678, or \$918,950 when adjusted for inflation and presented in year 2005 dollars). As in the above option, an in-season increase in the Tomales Bay quota, from 400 to 500 tons, is proposed should spawning escapement reach or exceed 4,000 tons before February 15, 2006. The 2005-06 Humboldt Bay and Crescent City Harbor herring fishery quotas remain the same as for the 2004-05. Thus the total ex-vessel revenue potential from all herring quotas, for all 417 herring fishermen, could be as much as \$4,298,145 (in year 2005 dollars) under the proposed Option 2. Using a statewide output multiplier and projected ex-vessel revenues of \$4,298,145 the economic contribution of the 2005-06 herring fishery could be as much as \$8,644,858 in year 2005 dollars. (This is calculated by taking the projected ex-vessel revenues and multiplying by a statewide demand output multiplier of 2.0113; e.g. 2.0113 x \$4,298,145= \$8,644,858).

Changes in the minimum mesh size for herring gill nets would increase fishermens' harvest of the relatively abundant younger (year 2 and year 3) fish. Since the proposed regulations offer a range of 2" to 2 1/4" mesh size, which encompasses the earlier mesh size nets, the proposed regulations do not require fishermen to replace their older nets. For herring fishermen who chose to purchase the new smaller mesh size nets, the cost for a new net is estimated to be around \$1,208 (excluding shipping and handling charges).

(b)	Businesses or the Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California:
	None.
(c)	Cost Impacts on a Representative Private Person or Business:
	The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action. There are no new fees or reporting requirements stipulated under the proposed regulations. The new fishing gear specifications do not impose a financial burden on fishermen since the proposed mesh size is a range that includes gears used in prior years.
(d)	Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:
	None.
(e)	Nondiscretionary Costs/Savings to Local Agencies:
	None.
(f)	Programs mandated on Local Agencies or School Districts:
	None.
(g)	Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4:
	None.
(h)	Effect on Housing Costs:
	None.

### INFORMATIVE DIGEST\POLICY STATEMENT OVERVIEW

Under existing law, herring may be taken for commercial purposes only under a revocable permit, subject to such regulations as the Fish and Game Commission shall prescribe. Current regulations specify: permittee qualifications; permit application procedures and requirements; permit limitations; permit areas; vessel identification requirements; fishing quotas; seasons; gear restrictions; quotas; and landing and monitoring requirements.

The proposed regulations would establish fishing quotas, specify net measurement methods, modify mesh size in San Francisco Bay, establish season dates and times that fishing operations are allowed, and require reimbursement of Department costs if fishing occurs on the weekend in Tomales Bay.

The following is a summary of the proposed changes in Sections 163 and 164, Title 14, CCR:

- The proposed regulations would establish fishing quotas by area for the 2005-06 herring fishing season, based on the most recent assessments of the spawning populations of herring in San Francisco and Tomales bays. Two options are provided for the San Francisco Bay quota. San Francisco Bay Quota Option 1 would set the guota at 5.890 tons which represents 10 percent of the 2004-05 spawning biomass estimate. If the Commission were to adopt this quota, this would result in a 10.4-ton individual quota for a "CH" gill net permittee and a 3.0-ton individual quota for a non-"CH" gill net permittee participating in the HEOK fishery. The Department recommends selecting Option 1 if the minimum mesh size remains at 2 1/8 inches. San Francisco Bay Quota Option 2 would set the quota at 4,502 tons which represents 7.6 percent of the 2004-05 spawning biomass estimate. If the Commission were to adopt this quota, this would result in a 7.9-ton individual quota for a "CH" gill net permittee and a 2.3-ton individual guota for a non-"CH" gill net permittee participating in the HEOK fishery. The Department recommends selecting Option 2 if the minimum mesh size were changed to 2 inches. An initial 400-ton fishing guota (eleven percent of the 2004-05 estimated spawning biomass of 3,686 tons) is proposed for Tomales Bay with provisions to increase the quota in- season if escapement goals are achieved by February 15, 2005.
- The proposed regulations would change the minimum mesh size in the San Francisco Bay gill net fishery from 2 1/8 to 2 inches.
- The proposed amendment specifies that the length of the meshes of any gill net used or possessed in the roe fishery in Tomales Bay, for the 2005-06 season only, shall be no less than 2 inches or greater than 2 ½ inches. This proposal is a continuation of regulations originally approved for the 2000-01 season to evaluate the effect of reduced mesh size on the length and age composition of herring caught in 2 inch mesh gill nets in Tomales Bay.
- The proposed regulations would allow weekend fishing in Tomales Bay. The Department proposes that should the Commission decide to allow weekend fishing in Tomales Bay, the Department shall be able to submit a detailed invoice to the appropriate party, or parties, for any increase in the cost of operations. The proposed amendment would allow weekend fishing in Tomales Bay.
- The proposed regulations would specify that the length of a gill net used in San Francisco and Tomales Bay shall be measured along the cork line.
- The proposed regulations would set the dates of the roe herring fisheries in San Francisco Bay from 5 p.m. on Sunday, December 11, 2005 until 6:00 a.m. on Friday, December 23, 2005 and re-open at 5 p.m. on Monday, December 26,

2005 until 6:00 a.m. on Friday, December 30, 2005 ("DH" gill net platoon only). Recommended dates for the odd and even platoons are from 5:00 p.m. on Monday January 2, 2006 until noon on Friday, March 17, 2006.

- The proposed regulations would set the dates of the roe herring fisheries in Tomales Bay from 5:00 p.m. on Sunday, December 25, 2005 until noon on Friday, December 30, 2005, and from 5:00 p.m. on Sunday, January 1, 2006 to noon on Friday, February 24, 2006.
- The proposed regulations would correct the Herring Eggs on Kelp Permit Application number in subsection164 (h)(1) to coincide with the 2005-06 season application.